

# An Abridged History of *NEPENTHES*<sup>1</sup>

By Harry James Veitch (1906)

## SPECIES

The first introduced to British Gardens was *Nepenthes distillatoria* [*N. khasiana*], the type species on which Linnaeus founded the genus. A native of Ceylon, this Pitcher had formed the subject of some remarkable writings by early travellers in the East before its introduction to this country and which, according to Aiton, was in 1780. *N. distillatoria* was not the first species known to science, that distinction probably belonging to *N. madagascariensis*, which nevertheless was one of the latest to reach England. *N. distillatoria* was followed in 1826 by *N. gracilis* (under the name *phyllamphora*) and in 1828 by *N. khasiana* three species before the year 1830. These were soon lost to cultivation, their cultural requirements being little understood.

Later followed *Nepenthes rafflesiana* and *N. ampullaria*, discovered by Dr. William Jack in Singapore, the former named in honour of Sir Stamford Raffles, but an attempt to introduce it by the discoverer was unsuccessful. Better fortune attended the labours of Captain Bethune, who brought living plants to Kew in a Wardian case [Victorian terrarium], which he so well cared for that they practically all lived.

In 1847, *Nepenthes hookeriana* was introduced to the Clapton Nursery by Mr. (later Sir Hugh) Low, and shortly afterwards Thomas Lobb sent to Exeter *N. rafflesiana*, *N. ampullaria*, *N. albo-marginata*, *N. veitchii*, *N. phyllamphora*, *N. sanguinea*, and other unnamed species. These formed the nucleus of the large collection since cultivated at Chelsea [at the Veitch nursery].

*Nepenthes laevis*, sent from Singapore, is figured and described by Lindley in the *Gardeners' Chronicle*, 1848, p. 655, from specimens growing in the houses at Chelsea at that time.

Sir Hugh Low made known four new species in 1851, having discovered them in making the ascent of Kina Balu, a well-known mountain in Borneo. These respectively *Nepenthes rajah*, *N. edwardsiana*, *N. lowii*, and *N. villosa*, were not introduced to cultivation at that time, but sufficient material was sent home to enable Sir Joseph Hooker to write a lucid account of the genus, in a paper read before the Linnaean Society in 1859.

Ten species and four hybrids are enumerated and described by Dr. Masters in the *Gardeners' Chronicle* for 1872, as growing at Chelsea in that year. The species mentioned were *Nepenthes ampullaria*, *N. veitchii*, *N. rafflesiana*, *N. phyllamphora*, *N. khasiana*, *N. albo-marginata*, *N. gracilis*, *N. laevis* and *S. sanguinea*.

During the following ten years some of the finest were introduced by the Veitchian collectors, including *Nepenthes rajah* and *N. bicarcarata* from Borneo through Burbidge; *N. hirsuta* from the same region through another agency; *N. madagascariensis* from Madagascar through Curtis; *N. kennedyana* from North Australia, and *N. viellardii*, a native of New Caledonia, through the Botanic Gardens at Sydney; and *N. northiana* from Borneo, also through Curtis. With a view of obtaining some of those remarkable plants made known through the discoveries of Mr. Low in Borneo, Thomas Lobb, acting under the direction of Mr. James Veitch Junior, reached the foot of Kina Balu in 1856, but was prevented from ascending the mountain by the hostility and extortion of the natives. He was followed in 1877 by Burbidge and P. C. M. Veitch, who met with a like failure, and again by the first-named, eight months later, on which occasion some seed of *N. rajah* was obtained, dispatched to Chelsea, and plants raised, but few lived. *N. rajah* has the largest pitchers of any known species, and these are described in Mr. Spencer St. John's book "Life in the Forests of the Far East": "This morning, while the men were cooking their rice, as we sat before the tent enjoying our chocolate, observing one of our followers carrying water in a splendid specimen of *Nepenthes rajah*, we desired him to bring it to us, and found that it held exactly four pint bottles. It was 19 in. in circumference. We afterwards saw others which were much larger, and Mr. Low, while wandering about in search of flowers, came upon one in which was a drowned rat." *N. albo-marginata* one of the earliest introduced species, previously unknown to science, was one of Thomas Lobb's Bornean discoveries, sent home to Exeter [Veitch nurseries] in 1848. The species is difficult to cultivate, but repays trouble by the great beauty of the pitcher, light green at the base, rosy red at the apex, with a pale band edging the top below the peristome.

<sup>1</sup>Hortus Veitchii, 1906.

*Nepenthes zeylanica*, or as it's sometimes called, *N. hirsuta glabrescens*, and *N. zeylanica rubra*, a red form of the type, were the next introductions, followed shortly afterwards by the handsome, and still rare, *N. veitchii*. Much confusion has arisen regarding the nomenclature of this species, sometimes called *N. lanata* and also *N. villosa*, both in themselves good species.

*Nepenthes veitchii* was first met with by Hugh Low Esq. Junior, on Mount Kina Balu, Borneo, but not introduced. Later found by the collector Thomas Lobb in Sarawak, living plants sent to Exeter proved one of the most remarkable of all *Nepenthes*: large pitchers covered with hair, a remarkable peristome or frill round the mouth, resembling both in structure and appearance the gills of a fish; the frill cream-coloured, slightly reddish; the habit as in other of the family.

In 1879 *Nepenthes veitchii* was followed by *N. kennedyana*, a species from Cape York, North Australia, sent from the Botanical Gardens, Sydney; the pitchers are over 5 in. in length by 1½ in. in width, reddish in colour, elongate-cylindrical in shape, slightly dilated below the middle and tapering at the base with two sharply fringed wings.

In 1880 Messrs. Veitch distributed and figured in the Catalogue the Bornean species *Nepenthes bicalcarata*, found in Borneo, by Low, Beccari, and other early travellers, but not sent to England till Burbidge found it in the neighborhood of Lazas River. *N. bicalcarata* is peculiar in having two prominent spurs projecting from below the base of the operculum over the mouth of the pitcher, as the head of a snake with projecting fangs and head uplifted about to strike. It is one of the most robust and vigorous of all Pitcher-plants. The *N. dyak* of Mr. S. Le Moore, figured in the *Journal of Botany*, is an immense form of this species.

In 1881 Dr. Masters described in the *Gardeners' Chronicle* a new species raised from seed sent from Sarawak by Curtis as *Nepenthes angustifolia*. Of no value as a decorative plant, it was not distributed. A more important species, one of the first to be known, was also introduced through Curtis, *N. madagascariensis*, not introduced till 1880. The name denotes the island in which it was discovered, the extreme western limit of the *Nepenthes* range. It is at home in fully exposed swamps, and has characters clearly distinguishing it from all other species. The pitchers from 6 to 8 in. long, remarkable for the richness of their coloration, rival in this the *N. sanguinea* of Borneo.

The next important find was *Nepenthes rajah*, a magnificent species already alluded to, named in honour of Rajah Brook, whose services to its country it commemorates.

In the following year, 1883, *Nepenthes northiana*, a species as wonderful as the last named, was offered to European growers, the specific name commemorating Miss North, the lady through whom it was first made known.

Plant drawings executed by Miss North in Borneo were shown to Mr. Harry Veitch, and one of a curious Pitcher-plant, at that time unknown to science, greatly attracted his attention. Further information was obtained regarding the habitat, and Curtis, about to start on a collecting expedition to Borneo, was commissioned to go in search. After long and unsuccessful effort, Curtis gave up hope, under the impression that Miss North had been wrongly informed, but fortunately before leaving the district it occurred to him to look over a steep escarpment in the hillside, accomplished by lying prostrate on the ground, when to his great joy he discovered the long-looked-for plant some distance below.

He succeeded in gathering ripe capsules, and lost no time in transmitting them to Chelsea, where the seed soon germinated. The pitchers of *Nepenthes northiana* are flask-shaped, striped and spotted with purple on a greenish ground, when mature they are 1 ft. and more long, and 3½ in. in width, with two dentate fimbriate wings. The mouth oblique, surrounded by a broad finely ribbed margin or peristome. The shape variable; the upper pitchers swing in mid-air unsupported, trumpet-shaped, whilst those on the ground are larger and more distended.

Another handsome species, *Nepenthes curtisii*, was sent from Borneo, and offered in 1888. The pitchers dull green, are thickly spotted with purple. A fine variety of this species, *N. c. superba*, possesses larger and more highly coloured urns than the type.

In the following year Burke collected plants and seeds of two species in the Philippines, one *Nepenthes burkei*, commemorating his labours. Handsome pitchers narrowed in the middle, devoid of the winged appendages common to the majority. A variety *N. b. excellens* is richly coloured and unusually handsome. During this trip Burke also collected a further supply of seed of *N. northiana*, and from this was obtained a distinct plant distributed under the name of *N. cincta*. It is a supposed natural hybrid between *N. northiana* and *N. albo-marginata* (as these two plants grow in company), and from the resemblance *N. cincta* bears to the two species, the inference is reasonable. It

resembles *N. northiana* in leaf and habit of growth, and the pitchers have the white band round the mouth characteristic of *N. albo-marginata*.

Another handsome species, obtained through Mr. Ford, late of the Hong Kong Botanic Gardens, and also from the Royal Gardens, Kew, 1891, is *Nepenthes ventricosa*, a native of the Philippines, one of the most distinct of this remarkable genus. The pitchers, wholly without wings, are curiously contracted in the mid-

dle, with a transverse, not oblique mouth, surrounded by a bright red undulating peristome marked with numerous transverse ribs. The colour delicate pale green with a rosy suffusion at the base, without spots, the pitchers deepening in colour to a deep purplish-rose as they reach maturity.

Many of the species are from various causes now lost to cultivation, or supplanted by hybrids, in most cases easier to cultivate and more decorative.

## HYBRIDS

The artificial hybridization of *Nepenthes* was commenced by John Dominy at Exeter [site of the first of the Veitch family nurseries], and continued by Seden, Court, and Tivey at Chelsea.

The dioecious [separate male and female plants] character of the *Nepenthes* renders the pollination of a female flower easy, as emasculation is unnecessary and self-fertilization an impossibility; but there are drawbacks to even these apparently advantageous conditions, the greatest the difficulty often experienced of procuring pollen when a female plant is in flower, and *vice versa*, as the sexes seldom flower at the same time. The methods pursued in cultivating *Nepenthes* as decorative subjects are likewise unfavourable to the production of flowers, as pitchers being the desiderata, plants are subjected to severe pruning, with the object of their production.

The species used by Dominy in the first cross was an unnamed one with green pitchers from Borneo, and *Nepenthes rafflesiana*, the result a plant producing pitchers fairly intermediate in character. Named *N. x dominiana* after its raiser, and distributed in 1862, exhibited at the Royal Horticultural Society's Show, held in June of the same year at Kensington. The second of Dominy's hybrids, *N. x hybrida*, had as parents *N. khasiana* (then known as *N. distillatoria*) and an unnamed Bornean species. The pitchers larger than those of *N. distillatoria*, were bright green. A variety *N. x hybrida maculata* has green pitchers thickly covered with red spots; both were distributed in 1866.

Seden followed Dominy in this interesting work, and obtained his first hybrid, which bears his name, from *Nepenthes khasiana* (*distillatoria*) and an unnamed Bornean species, the same as Dominy employed in producing *N. x hybrida*. The pitchers of *N. x sedenii* are vivid green, splashed with bright crimson spots.

This was followed by *Nepenthes x chelsoni*, also raised by Seden, from *N. hookeriana* crossed with the pollen from *N. x dominii*, a hybrid being used for the first time as a parent.

The work of hybridization has been carried on by succeeding growers whenever staminate and pistillate flowers have been available simultaneously, either of species or of hybrids.

Court, who succeeded Seden, produced several fine hybrids, the first *Nepenthes x intermedia*, the result of crossing an unnamed species with *N. rafflesiana*, followed in 1877 by *N. x courtii*, from the same parentage as *N. x hybrida*.

*Nepenthes x stewartii* appeared in 1879, from *N. phyllamphora* crossed with *N. hookeriana*, and *N. x ratcliffiana* in 1881 from a similar parentage. The latter dedicated to Alfred E. Ratcliff Esq., of Edgbaston, Birmingham, at that time a distinguished amateur of this interesting race.

The year 1883 is noteworthy for one of the most ornamental and easily grown of all hybrid *Nepenthes*, *N. x mastersiana*, "in compliment to Dr. Masters, of the *Gardeners' Chronicle*, as a slight recognition of his invaluable services to Horticulture." Raised by Court from *N. sanguinea* crossed with *N. khasiana* (*N. distillatoria*, Glasnevin variety, of gardens) the seed remained dormant so long that it barely escaped destruction. Fortunately life was detected at the last moment, and a further trial resulted in a plant which ranks amongst the finest of the genus. *N. x mastersiana* produces pitchers remarkable for a fine coloration, rivalling that of *N. sanguinea*, with the characteristic blotches of *N. distillatoria*. The plant is of a robust constitution, dwarf in habit.

*Nepenthes x dicksoniana*, offered in 1889, is the offspring of *N. rafflesiana* flowering in the Botanic Gardens at Edinburgh, fertilized by pollen of *N. veitchii* sent from Chelsea. Mr. Lindsay, late Curator of the Edinburgh

Botanic Gardens, effected the cross, and in deference to his wish the seedling bears the name of Professor Dickson, formerly Professor of Botany at the University. The pitchers of the hybrid are fully 10 in. long, sub-cylindric, of a light fulvous green, densely spotted and speckled with bright crimson.

George Tivey, to whose charge the *Nepenthes* were eventually entrusted [at the Veitch nurseries] has produced some excellent crosses, the parentage indisputable, a statement which cannot be made without reserve of some of the earlier results, of which records are imperfect, and when the variability both in colour and shape of the pitchers, a marked characteristic of seedling *Nepenthes*, was not so well understood or appreciated.

Tivey's first hybrid, *Nepenthes x mixta*, was from two beautiful species, *N. northiana* and *N. curtisii*, the latter the pollen parent. As might be expected *N. x mixta* is a fine cross, with pitchers 1 ft. or more in length, of a cream-yellow colour suffused with red and blotched as is *N. northiana*. The wings shallow, are deeply lacinated; the ribs, which form the mouth of the pitcher, of a rich shining crimson. It was distributed in 1893. A handsome variety, *N. x mixta sanguinea*, has reddish-brown pitchers spotted with large blotches of chocolate-brown.

The next success was a superb cross from *Nepenthes veitchii* and *N. curtisii*, *N. x tiveyi*, named in compliment to the raiser. *N. veitchii*

is one of the grandest Pitcher-plants in cultivation, remarkable for hairy pitchers and a curious gill-like peristome, and many of the best characteristics have been imparted to the hybrid, the most conspicuous the broad rim round the mouth, richly coloured a deep mahogany-red, with occasional transverse bars of a deeper shade. The pitchers, larger than those of *N. veitchii*, have much the same form, but are on finer lines.

Another beautiful Pitcher offered in 1903 is probably one of the finest hybrid *Nepenthes* in cultivation, a result effected by Tivey between *N. x mixta* and *N. x dicksoniana*, both hybrids. It is named Sir William T. Thiselton-Dyer in honour of the late Director of the Royal Gardens, Kew. The pitchers attain a length of 14 in. or more, are subcylindric in shape, with a handsome peristome or ribbed mouth, the colour bright crimson, and the form undulate as in *N. x mixta*. The ground color of the body is green, the surface irregularly blotched with large spots of purplish or crimson brown. In addition to the ordinary slender spur at the back of the lid, the hump-like process characteristic of *N. curtisii* is prominent.

The majority or all of the hybrids mentioned, raised under artificial conditions in this country, have proved more amenable to cultivation than many species from the equatorial regions, and, from a horticultural point of view, are very much superior.

"This morning, . . . we sat before the tent enjoying our chocolate, observing one of our followers carrying water in a splendid specimen . . ."

Longwood Gardens  
Photograph

